

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0062669

Effective Date:

May 6, 2011

Expiration Date:

May 5, 2016

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit, as set forth herein.

Owner:

Sussex Service Authority

Facility Name:

Stony Creek WWTF

County:

Sussex

Facility Location:

12521 Setzer Road, Stony Creek VA 23882

The owner is authorized to discharge to the following receiving stream:

Stream:

Stony Creek

River Basin:

Chowan and Dismal Swamp

River Subbasin:

Chowan River

Section:

2b

Class:

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Special Standards:

None

Water Permit Manager, Piedmont Regional Office

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A. <u>Effluent Limitations and Monitoring Requirements</u>

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date the permittee is authorized to discharge from outfall number 001. This discharge shall be limited and monitored as specified below:

| | | DISCHARGE LIMITS | | | | | | MONITORING REQUIREMENTS | | |
|---|---------|------------------|---------|--------------|----------|---------|-----------------------|-------------------------|--|--|
| EFFLUENT CHARACTERISTICS | MONTHLY | AVERAGE | | EKLY RAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE | | |
| 001 Flow (MGD) | NL | | NA | | NA | NL | 1/Day | Estimate | | |
| 002 pH (standard units) | N | IA | N | NA | 6.0 | 9.0 | 1/Day ^b | Grab | | |
| 003 BOD ₅ ° | 30 mg/l | 4500 g/d | 45 mg/l | 6800 g/d | NA | NA | 1/Month ^b | Grab | | |
| 004 Total Suspended Solids ^c | 30 mg/l | 4500 g/d | 45 mg/l | 6800 g/d | NA | NA | 1/Month ^b | Grab | | |
| 005 Total Residual Chlorine ^a | | 1 mg/l | | 9 mg/l | NA | NA | 1/Day ^b | Grab | | |
| 007 Dissolved Oxygen | N | IA | N | NA | 5.5 mg/l | NA | 1/Day ^b | Grab | | |
| 120 <i>E. coli</i> (N/100ml) | ٨ | IL | N | NA | NA | NA | 4/Month (10am-4pm) | Grab | | |

- a. See Part I.B.1 for additional TRC limits that apply at the outlet of each chlorine contact tank.
- b. Effluent samples shall be collected after post-aeration.
- c. The limitation is expressed in two significant figures.

NL = No Limitation; monitoring and reporting are required

NA = Not Applicable

- 2. The design flow of this treatment facility is 0.040 MGD. See Part I.C.1 for additional requirements.
- 3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 4. At least 85% removal for BOD₅ and TSS must be attained for this effluent.

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B. Additional Chlorine Limitations and Monitoring Requirements

- Total Residual Chlorine Limitations and Monitoring Requirements Applying to the Contact Tank
 - a. The permittee shall monitor the TRC at the outlet of each chlorine contact tank once per day by grab sample.
 - b. No more than 3 of all samples taken at the outlet of the chlorine contact tank shall be less than 1.0 mg/l for any one calendar month (DMR parameter 157).
 - c. No TRC outlet sample collected at the outlet of the chlorine contact tank shall be less than 0.60 mg/l (DMR parameter 213).
 - d. If dechlorination facilities exist the samples above shall be collected prior to dechlorination
- 2. If chlorine disinfection is not used, then *E. coli* shall be limited and monitored by the permittee as specified below and this requirement, if applicable, shall substitute for the TRC and *E. coli* requirements delineated elsewhere in Part I of this permit.

| DISCHARG | DISCHARGE LIMITATIONS | | REQUIREMENTS SAMPLE TYPE |
|----------|--|--------|--------------------------------|
| E. coli | 126 N/100mL Monthly geometric mean | 1/Week | Grab (Between 10 am & 4 pm) |

C. Other Requirements or Special Conditions

1. 95% Capacity Reopener

A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Department of Environmental Quality (DEQ) Piedmont Regional Office, when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the DEQ Piedmont Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

2. Indirect Dischargers

The permittee shall provide adequate notice to the DEQ Piedmont Regional Office of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
- b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

3. CTC, CTO Requirement

The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ Office of Wastewater Engineering (for Water Quality Improvement Funded (WQIF) projects) or submitted by the design engineer and owner to the DEQ regional water permit manager (for non WQIF projects) prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

4. Operation and Maintenance Manual Requirement

The permittee shall review the existing Operations and Maintenance (O&M) Manual and notify the DEQ Piedmont Regional Office in writing within 90 days of the effective date of this permit whether it is still accurate and complete. If the O&M Manual is no longer accurate and complete, a revised O&M Manual shall be submitted for approval to the DEQ Piedmont Regional Office within 90 days of the effective date of this permit. The permittee will maintain an accurate, approved operation and maintenance manual for the treatment works. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of the permit. The permittee shall operate the treatment works in accordance with the approved O&M Manual. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Techniques to be employed in the collection, preservation, and analysis of effluent and sludge samples;
- b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
- Discussion of Best Management Practices, if applicable;
- d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters;
- e. Treatment works design, treatment works operation, routine preventative maintenance of units within the treatment system, critical spare parts inventory and record keeping; and,
- f. A plan for the management and/or disposal of waste solids and residues.

Any changes in the practices and procedures followed by the permittee shall be documented and

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submitted for DEQ Piedmont Regional staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O&M Manual shall be deemed a violation of the permit.

5. Licensed Operator Requirement

The permittee shall employ or contract at least one **Class III** licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

6. Reliability Class

The permitted treatment works shall meet Reliability Class II.

7. Closure Plan

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ Piedmont Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation.

8. Sludge Reopener

The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

9. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

10. Water Quality Criteria Monitoring

The permittee shall monitor the effluent at outfall 001 for the substances noted in Attachment A, "Water Quality Criteria Monitoring" according to the indicated analysis number, quantification level, sample type and frequency. Monitoring shall be initiated after the effective date of this permit. Using Attachment A as the reporting form, the data shall be submitted within one year of the effective date of this permit. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.

See Permit Attachment A.

11. Water Quality Criteria Reopener

Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

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12. Compliance Reporting

a. The quantification levels (QL) shall be less than or equal to the following concentrations:

| Effluent Characteristic | Quantification Level | | |
|-------------------------|----------------------|--|--|
| BOD ₅ | 5.0 mg/l | | |
| Total Suspended Solids | 1.0 mg/l | | |
| Total Residual Chlorine | 0.10 mg/l | | |

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit.

b. Monthly Average

Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities

Weekly Average

Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the weekly average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

- **c. Single Datum -** Any single datum required shall be reported as "<QL" if it is less than the QL used for the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.
- **d.** Significant Digits The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.
- **e.** For parameters not addressed in paragraph a. above, all concentration data less than the QL used for analysis shall be treated as being equal to the QL used for the analysis in the calculation of any required average concentration or loading. The resulting average value shall be reported on the DMR as being less than ("<") that calculated value.

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13. Sludge Use and Disposal

The permittee shall, within 120 days of the effective date of this permit, submit for DEQ approval a revised Sludge Management Plan (SMP). The SMP shall include information on sewage sludge and biosolids sampling and testing, operational testing and control and record keeping necessary to document the quality and proper use and disposal of sewage sludge and biosolids. The permittee shall conduct all biosolids use and disposal activities in accordance with the approved SMP, which becomes an enforceable part of the permit upon approval.

14. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

15. Ground Water Monitoring

The permittee shall continue sampling and reporting in accordance with the ground water monitoring plan approved on 4/12/1990. The purpose of this plan is to determine if the system integrity is being maintained and to indicate if activities at the site are resulting in violations of the Board's Groundwater Standards (9 VAC 25-280-10 et seq.). The approved plan is an enforceable part of the permit. Any changes to the plan must be submitted for approval to the Piedmont Regional Office.

If monitoring results indicate that any unit has contaminated the ground water, then the permittee shall submit a corrective action plan within 60 days of being notified by the regional office. The plan shall set forth the steps to be taken by the permittee to ensure that the contamination source is eliminated or the contaminant plume is contained on the permittee's property. In addition, based on the extent of contamination, a risk analysis may be required. Once approved, this plan and/or analysis shall become an enforceable part of this permit.

See Permit Attachment B.

16. Inflow and Infiltration (I&I) Study

The permittee shall submit to DEQ Piedmont Regional Office no later than August 10th following the effective date of this permit an approvable corrective action master plan for the management and minimization of inflow and infiltration problems in the collection and treatment works in order to address excessive influent flows to the treatment works. The plan shall include an evaluation of sewer line conditions, a list of necessary improvements and a schedule for corrective actions to be implemented during the permit term. Once approved, the plan shall be incorporated into the permit by reference and become an enforceable part of this permit. An annual progress report shall be submitted to the DEQ Piedmont Regional office no later than August 10th of each year. The annual progress report shall include a description of the permittee's corrective actions over the previous fiscal year, an evaluation of sewer line conditions and effectiveness of previous corrective actions, and a prioritization of improvements and schedule for corrective actions to be taken within the next calendar year. If any of the necessary improvements listed in the master plan are not met as scheduled, the permittee shall provide with the annual report, an explanation of the situation and a description of completed and intended actions to bring corrective actions back on schedule in accordance with the DEQ approved corrective action master plan. Corrective actions shall continue to be implemented until influent flows no longer exceed 95% of the design capacity authorized in this permit for any three consecutive month period during a complete calendar reporting year, or a CTO is issued for a treatment works design flow expansion, whichever occurs first. Corrective actions shall be re-instituted should three consecutive monthly influent flows exceed 95% of the design capacity in any subsequent reporting periods.

17. Pretreatment Program

a. Within 180 days of the effective date of this permit, the permittee shall submit to the DEQ Piedmont Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted on the DEQ Discharger Survey Form, or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW. In lieu of the survey, the permittee may elect to develop, submit for DEQ Piedmont Regional Office approval, and implement a plan to survey (using internal work processes and

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systems controls), on pre-established intervals throughout the term of this permit, the industrial community in their jurisdiction; if an alternative plan is developed, the permittee shall submit the plan to the DEQ Piedmont Regional Office for approval 90 days after the effective date of this permit.

- b. Should evaluation by the DEQ of results of the Industrial User survey conducted in accordance with item a. above indicate that the permittee is not required to implement a pretreatment program, the requirements for program development described in item d below may be suspended by the DEQ.
- c. If Categorical Industrial User(s) are identified, or if the permittee or DEQ determines that the industrial user(s) have potential to adversely affect the operation of the POTW or cause violation(s) of federal, state or local standards or requirements, the permittee shall develop and submit to the DEQ Regional Office within one year of written notification by DEQ a pretreatment program for approval. The program shall enable the permittee to control by permit the Significant Industrial Users* discharging wastewater to the treatment works.
- d. The approvable pretreatment program submission shall at a minimum contain the following parts:
 - (1) Legal authority,
 - (2) Program procedures,
 - (3) Funding and resources,
 - (4) Local limits evaluation, and local limits if needed,
 - (5) Enforcement response plan, and
 - (6) List of Significant Industrial Users *.
- e. Where the permittee is required to develop a pretreatment program, they shall submit to the DEQ Regional Office an annual report no later than January 31 of each year and must include:
 - (1) An updated list of the Significant Industrial Users* (SIUs) noting all of the following:
 - (a) facility address (mailing and physical), phone and contact name, title and email;
 - (b) explanation of SIUs deleted from the previous years list;
 - (c) identify which Industrial Users (IUs) are subject to Categorical Standards and note which Standard (i.e. metal finishing);
 - (d) specify which 40 CFR part(s) is/are applicable;
 - (e) indicate which IUs are subject to local standards that are more stringent than Categorical Pretreatment Standards;
 - (f) indicate which IUs are subject only to local requirements;
 - (g) identify which IUs are subject to Categorical Pretreatment Standards that are subject to reduced reporting requirements under 9VAC25-31-840 E.3;
 - (h) identify which IUs are non-significant Categorical Industrial Users;
 - (i) applicable Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes.
 - (2) A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
 - (3) A summary of the number and types of Significant Industrial User sampling and inspections performed by the Publically Owned Treatment Works (POTW).
 - (4) All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.
 - (5) A description of all enforcement actions taken against Significant Industrial Users during the reporting period.
 - (6) A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office.

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- (7) A summary of the permits issued to Significant Industrial Users since the last annual report.
- (8) POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
- (9) Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
- (10) Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period.
- (11) Signature of an authorized representative.
- f. The DEQ may require the POTW to institute changes to the legal authority regarding Significant Industrial User permit(s):
 - (1) If the legal authority does not meet the requirements of the Clean Water Act, Water Control Law or State regulations;
 - (2) If problems such as interferences, pass-through, violations of water quality standards or sludge contamination develop or continue; or
 - (3) If federal, state or local requirements change.

*A significant industrial user is one that:

- Has an average flow of 25,000 gallons or more per day of process** wastewater;
- Contributes a process wastestream which makes up 5.0-percent or more of the average dry weather hydraulic or organic capacity of the POTW;
- Is subject to the categorical pretreatment standards; or
- Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.

^{**}Excludes sanitary, non-contact cooling water and boiler blowdown.

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

- 1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
- 2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

B. Records

- 1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

DEQ - Piedmont Regional Office 4949-A Cox Road Glen Allen, VA 23060

- 2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved, or specified by the Department.
- 3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.
- 4. Calculations for all limits which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

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D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

- 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
- 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F 1; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F 1, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

- 1. A description of the nature and location of the discharge;
- 2. The cause of the discharge;
- 3. The date on which the discharge occurred;
- The length of time that the discharge continued;
- 5. The volume of the discharge;
- 6. If the discharge is continuing, how long it is expected to continue;
- 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
- 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit. Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall

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promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

- 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
- 2. Breakdown of processing or accessory equipment;
- 3. Failure or taking out of service some or all of the treatment works; and
- 4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

- 1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
- 2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office at (804) 527-5020 or fax (804) 527-5106. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

- 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the

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standards are promulgated in accordance with Section 306 within 120 days of their proposal;

- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
- c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- 2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

- 1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulation; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II K 1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

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- c. The written authorization is submitted to the Department.
- 3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

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Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate licensed operator staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limits to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and U 3.

2. Notice

- Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.

3. Prohibition of bypass.

- a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II U 2.
- The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

V. Upset

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- An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limits if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated; and
 - c. The permittee submitted notice of the upset as required in Part II I 2.
 - d. The permittee complied with any remedial measures required under Part II S.
- 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection time unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of Permits

- Permits are not transferable to any person except after notice to the Department. Except as
 provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or
 operator only if the permit has been modified or revoked and reissued, or a minor
 modification made, to identify the new permittee and incorporate such other requirements as
 may be necessary under the State Water Control Law and the Clean Water Act.
- 2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

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c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

ATTACHMENT A DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY CRITERIA MONITORING

| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|------------|-------------------------------------|---------------------|--|----------------------|-------------------------------|---------------------|
| | | MET/ | ALS | | | |
| 7440-36-0 | Antimony, dissolved | (3) | 1.4 | | G or C | 1/5 YR |
| 7440-38-2 | Arsenic, dissolved | (3) | 1.0 | | G or C | 1/5 YR |
| 7440-43-9 | Cadmium, dissolved | (3) | 0.3 | | G or C | 1/5 YR |
| 16065-83-1 | Chromium III, dissolved (8) | (3) | 3.6 | | G or C | 1/5 YR |
| 18540-29-9 | Chromium VI, dissolved (8) | (3) | 1.6 | | G or C | 1/5 YR |
| 7440-50-8 | Copper, dissolved | (3) | 0.50 | | G or C | 1/5 YR |
| 7439-92-1 | Lead, dissolved | (3) | 0.50 | | G or C | 1/5 YR |
| 7439-97-6 | Mercury, dissolved | (3) | 1.0 | | G or C | 1/5 YR |
| 7440-02-0 | Nickel, dissolved | (3) | 0.94 | | G or C | 1/5 YR |
| 7782-49-2 | Selenium, Total Recoverable | (3) | 2.0 | | G or C | 1/5 YR |
| 7440-22-4 | Silver, dissolved | (3) | 0.20 | | G or C | 1/5 YR |
| 7440-28-0 | Thallium, dissolved | (4) | (5) | | G or C | 1/5 YR |
| 7440-66-6 | Zinc, dissolved | (3) | 3.6 | | G or C | 1/5 YR |
| | | PESTICIDE | S/PCB'S | | | |
| 309-00-2 | Aldrin | 608 | 0.05 | | G or C | 1/5 YR |
| 57-74-9 | Chlordane | 608 | 0.2 | | G or C | 1/5 YR |
| 2921-88-2 | Chlorpyrifos (synonym = Dursban) | (4) | (5) | | G or C | 1/5 YR |
| 72-54-8 | DDD | 608 | 0.1 | | G or C | 1/5 YR |
| 72-55-9 | DDE | 608 | 0.1 | | G or C | 1/5 YR |
| 50-29-3 | DDT | 608 | 0.1 | | G or C | 1/5 YR |
| 8065-48-3 | Demeton | (4) | (5) | | G or C | 1/5 YR |
| 333-41-5 | Diazinon | (4) | (5) | | G or C | 1/5 YR |
| 60-57-1 | Dieldrin | 608 | 0.1 | | G or C | 1/5 YR |
| 959-98-8 | Alpha-Endosulfan | 608 | 0.1 | | G or C | 1/5 YR |
| 33213-65-9 | Beta-Endosulfan | 608 | 0.1 | | G or C | 1/5 YR |
| | | 608 | 0.1 | | G or C | 1/5 YR |

| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|-----------|---|---------------------|--|----------------------|-------------------------------|---------------------|
| 72-20-8 | Endrin | 608 | 0.1 | | G or C | 1/5 YR |
| 7421-93-4 | Endrin Aldehyde | (4) | (5) | | G or C | 1/5 YR |
| 86-50-0 | Guthion | (4) | (5) | | G or C | 1/5 YR |
| 76-44-8 | Heptachlor | 608 | 0.05 | | G or C | 1/5 YR |
| 1024-57-3 | Heptachlor Epoxide | (4) | (5) | | G or C | 1/5 YR |
| 319-84-6 | Hexachlorocyclohexane Alpha-BHC | 608 | (5) | | G or C | 1/5 YR |
| 319-85-7 | Hexachlorocyclohexane Beta-BHC | 608 | (5) | | G or C | 1/5 YR |
| 58-89-9 | Hexachlorocyclohexane Gamma-BHC or Lindane | 608 | (5) | | G or C | 1/5 YR |
| 143-50-0 | Kepone | (9) | (5) | | G or C | 1/5 YR |
| 121-75-5 | Malathion | (4) | (5) | | G or C | 1/5 YR |
| 72-43-5 | Methoxychlor | (4) | (5) | | G or C | 1/5 YR |
| 2385-85-5 | Mirex | (4) | (5) | | G or C | 1/5 YR |
| 56-38-2 | Parathion | (4) | (5) | | G or C | 1/5 YR |
| 1336-36-3 | PCB Total | 608 | 7.0 | | G or C | 1/5 YR |
| 8001-35-2 | Toxaphene | 608 | 5.0 | | G or C | 1/5 YR |
| | BASE N | EUTRAL E | XTRACTA | BLES | | |
| 83-32-9 | Acenaphthene | 625 | 10.0 | | G or C | 1/5 YR |
| 120-12-7 | Anthracene | 625 | 10.0 | | G or C | 1/5 YR |
| 92-87-5 | Benzidine | (4) | (5) | | G or C | 1/5 YR |
| 56-55-3 | Benzo (a) anthracene | 625 | 10.0 | | G or C | 1/5 YR |
| 205-99-2 | Benzo (b) fluoranthene | 625 | 10.0 | | G or C | 1/5 YR |
| 207-08-9 | Benzo (k) fluoranthene | 625 | 10.0 | | G or C | 1/5 YR |
| 50-32-8 | Benzo (a) pyrene | 625 | 10.0 | | G or C | 1/5 YR |
| 111-44-4 | Bis 2-Chloroethyl Ether | (4) | . (5) | | G or C | 1/5 YR |
| 108-60-1 | Bis 2-Chloroisopropyl Ether | (4) | (5) | | G or C | 1/5 YR |
| 85-68-7 | Butyl benzyl phthalate | 625 | 10.0 | | G or C | 1/5 YR |
| 91-58-7 | 2-Chloronaphthalene | (4) | (5) | | G or C | 1/5 YR |
| 218-01-9 | Chrysene | 625 | 10.0 | T. Canada | G or C | 1/5 YR |
| | | 625 | 20.0 | | GorC | 1/5 YR |

| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|----------|---|---------------------|--|----------------------|-------------------------------|---------------------|
| 84-74-2 | Dibutyl phthalate (synonym = Di-n-Butyl Phthalate) | 625 | 10.0 | | G or C | 1/5 YR |
| 95-50-1 | 1,2-Dichlorobenzene | 624 | 10.0 | | G or C | 1/5 YR |
| 541-73-1 | 1,3-Dichlorobenzene | 624 | 10.0 | | G or C | 1/5 YR |
| 106-46-7 | 1,4-Dichlorobenzene | 624 | 10.0 | | G.or C | 1/5 YR |
| 91-94-1 | 3,3-Dichlorobenzidine | (4) | (5) | | G or C | 1/5 YR |
| 84-66-2 | Diethyl phthalate | 625 | 10.0 | | G or C | 1/5 YR |
| 117-81-7 | Bis-2-ethylhexyl phthalate | 625 | 10.0 | | G or C | 1/5 YR |
| 131-11-3 | Dimethyl phthalate | (4) | (5) | | G or C | 1/5 YR |
| 121-14-2 | 2,4-Dinitrotoluene | 625 | 10.0 | | G or C | 1/5 YR |
| 122-66-7 | 1,2-Diphenylhydrazine | (4) | (5) | | G or C | 1/5 YR |
| 206-44-0 | Fluoranthene | 625 | 10.0 | | G or C | 1/5 YR |
| 86-73-7 | Fluorene | 625 | 10.0 | , | G or C | 1/5 YR |
| 118-74-1 | Hexachlorobenzene | (4) | (5) | | G or C | 1/5 YR |
| 87-68-3 | Hexachlorobutadiene | (4) | (5) | | G or C | 1/5 YR |
| 77-47-4 | Hexachlorocyclopentadiene | (4) | (5) | | G or C | 1/5 YR |
| 67-72-1 | Hexachloroethane | (4) | (5) | | G or C | 1/5 YR |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 625 | 20.0 | | G or C | 1/5 YR |
| 78-59-1 | Isophorone | 625 | 10.0 | | G or C | 1/5 YR |
| 98-95-3 | Nitrobenzene | 625 | 10.0 | | G or C | 1/5 YR |
| 62-75-9 | N-Nitrosodimethylamine | (4) | (5) | | G or C | 1/5 YR |
| 621-64-7 | N-Nitrosodi-n-propylamine | (4) | (5) | | G or C | 1/5 YR |
| 86-30-6 | N-Nitrosodiphenylamine | (4) | (5) | | G or C | 1/5 YR |
| 129-00-0 | Pyrene | 625 | 10.0 | | G or C | 1/5 YR |
| 120-82-1 | 1,2,4-Trichlorobenzene | 625 | 10.0 | | G or C | 1/5 YR |
| | | VOLAT | ILES | · | | |
| 107-02-8 | Acrolein | (4) | (5) | | G | 1/5 YR |
| 107-13-1 | Acrylonitrile | (4) | (5) | | G | 1/5 YR |
| 71-43-2 | Benzene | 624 | 10.0 | | G | 1/5 YR |
| 75-25-2 | Bromoform | 624 | 10.0 | | G | 1/5 YR |

| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|------------|---|---------------------|--|----------------------|-------------------------------|---------------------|
| 56-23-5 | Carbon Tetrachloride | 624 | 10.0 | | G | 1/5 YR |
| 108-90-7 | Chlorobenzene (synonym = monochlorobenzene) | 624 | 50.0 | | G | 1/5 YR |
| 124-48-1 | Chlorodibromomethane | 624 | 10.0 | | G | 1/5 YR |
| 67-66-3 | Chloroform | 624 | 10.0 | | G | 1/5 YR |
| 75-09-2 | Dichloromethane (synonym = methylene chloride) | 624 | 20.0 | | G | 1/5 YR |
| 75-27-4 | Dichlorobromomethane | 624 | 10.0 | | G | 1/5 YR |
| 107-06-2 | 1,2-Dichloroethane | 624 | 10.0 | | G | 1/5 YR |
| 75-35-4 | 1,1-Dichloroethylene | 624 | 10.0 | | G | 1/5 YR |
| 156-60-5 | 1,2-trans-dichloroethylene | (4) | (5) | | G | 1/5 YR |
| 78-87-5 | 1,2-Dichloropropane | (4) | (5) | | G | 1/5 YR |
| 542-75-6 | 1,3-Dichloropropene | (4) | (5) | | G | 1/5 YR |
| 100-41-4 | Ethylbenzene | 624 | 10.0 | | G | 1/5 YR |
| 74-83-9 | Methyl Bromide | (4) | (5) | | G | 1/5 YR |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | (4) | (5) | | G | 1/5 YR |
| 127-18-4 | Tetrachloroethylene | 624 | 10.0 | | G | 1/5 YR |
| 10-88-3 | Toluene | 624 | 10.0 | | G | 1/5 YR |
| 79-00-5 | 1,1,2-Trichloroethane | (4) | (5) | | G | 1/5 YR |
| 79-01-6 | Trichloroethylene | 624 | 10.0 | | G | 1/5 YR |
| 75-01-4 | Vinyl Chloride | 624 | 10.0 | | G | 1/5 YR |
| | ACII | D EXTRAC | CTABLES (6 |) | | |
| 95-57-8 | 2-Chlorophenol | 625 | 10.0 | | G or C | 1/5 YR |
| 120-83-2 | 2,4 Dichlorophenol | 625 | 10.0 | | G or C | 1/5 YR |
| 105-67-9 | 2,4 Dimethylphenol | 625 | 10.0 | | G or C | 1/5 YR |
| 51-28-5 | 2,4-Dinitrophenol | (4) | (5) | | G or C | 1/5 YR |
| 534-52-1 | 2-Methyl-4,6-Dinitrophenol | (4) | (5) | | G or C | 1/5 YR |
| 25154-52-3 | Nonylphenol | (5) | (5) | | G or C | 1/5 YR |
| 87-86-5 | Pentachlorophenol | 625 | 50.0 | | G or C | 1/5 YR |
| 108-95-2 | Phenol | 625 | 10.0 | | G or C | 1/5 YR |
| 88-06-2 | 2,4,6-Trichlorophenol | 625 | 10.0 | | GorC | 1/5 YR |

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| CASRN# | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY | | |
|---------------|---------------------------------------|---------------------|--|----------------------|-------------------------------|---------------------|--|--|
| MISCELLANEOUS | | | | | | | | |
| 776-41-7 | Ammonia as NH3-N | 350.1 | 200 | | С | 1/5 YR | | |
| 16887-00-6 | Chlorides | (4) | (5) | | С | 1/5 YR | | |
| 7782-50-5 | Chlorine, Total Residual | (4) | 100 | | G | 1/5 YR | | |
| 57-12-5 | Cyanide, Free | (4) | 10.0 | | G | 1/5 YR | | |
| N/A | E. coli / Enterococcus (N/CML) | (4) | (5) | | G | 1/5 YR | | |
| 7783-06-4 | Hydrogen Sulfide | (5) | (5) | | G | 1/5 YR | | |
| 60-10-5 | Tributyltin (7) | NBSR 85-3295 | (5) | | G or C | 1/5 YR | | |
| 471-34-1 | Hardness (mg/L as CaCO ₃) | (4) | (5) | | G or C (10) | 1/5 YR | | |

Name of Principal Exec. Officer or Authorized Agent/Title

Signature of Principal Officer or Authorized Agent/Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) is defined as the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information shall be submitted to document that the required quantification level has been attained.

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals

samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour (**PW - Revise as required to require same composite duration as BOD**₅) composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

(3) A specific analytical method is not specified; however a target value for each metal has been established. An appropriate method to meet the target value shall be selected from the following list of EPA methods (or any approved method presented in 40 CFR Part 136). If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

Analytical Method

| WOO | / in a light out in a circa |
|-------------------------|-----------------------------|
| Antimony | 1638; 1639 |
| Arsenic | 1632 |
| Chromium ⁽⁸⁾ | 1639 |
| Cadmium | 1637; 1638; 1639; 1640 |
| Chromium VI | 1639 |
| Copper | 1638; 1640 |
| Lead | 1637; 1638; 1640 |
| Mercury | 1631 |
| Nickel | 1638; 1639; 1640 |
| Selenium | 1638; 1639 |
| Silver | 1638 |
| Zinc | 1638; 1639 |
| | |

(4) Any approved method presented in 40 CFR Part 136.

Metal

- (5) The QL is at the discretion of the permittee. For any substances addressed in 40 CFR Part 136, the permittee shall use one of the approved methods in 40 CFR Part 136.
- (6) Testing for phenols requires continuous extraction.
- (7) Analytical Methods: NBSR 85-3295 or DEQ's approved analysis for Tributyltin may also be used [See A Manual for the Analysis of Butyltins in Environmental Systems by the Virginia Institute of Marine Science, dated November 1996].
- (8) Both Chromium III and Chromium VI may be measured by the total chromium analysis. If the result of the total chromium analysis is less than or equal to the lesser of the Chromium III or Chromium VI method QL, the results for both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].
- (9) The lab may use SW846 Method 8270D provided the lab has an Initial Demonstration of Capability, has passed a PT for Kepone, and meets the acceptance criteria for Kepone as given in Method 8270D
- (10) The sample type for Hardness (as CaCO₃) shall match the sample type selected for Dissolved Metals.

ATTACHMENT B

GROUND WATER MONITORING FORM

Monitoring Period

Stony Creek Wastewater Treatment Facility

Permit No. VA0062669

| | | | | Yr Mo | to Day Yr M | lo Day |
|---------------------------|-------------------|-------|----------------|-------|----------------|---------|
| | | | Monitoring Wel | | SAM | PLE |
| PARAMETER | Units | No. 1 | No. 2 | No. 3 | Frequency | Туре |
| Ground Water Elevation | ft. MSL | | | | 1/Year | Measure |
| рН | standard units | | | | 1/Year | Grab |
| Specific Conductivity | M-M/cm | | | | 1/Year | Grab |
| Nitrate-Nitrogen | mg/l | | | | 1/Year | Grab |
| Ammonia-Nitrogen | mg/l | | | | 1/Year | Grab |
| Total Organic Carbon | mg/l | | | | 1/Year | Grab |
| Chlorides | mg/l | | | | 1/Year | Grab |

| Signature of Authorized Agent | Date |
|---|----------|
| Signature of Operator in Responsible Charge | Date |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. §1001 and 33 U.S.C. §1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)